

FIG. 1

2/16

20 WATERMARK INSERTION APPARATUS

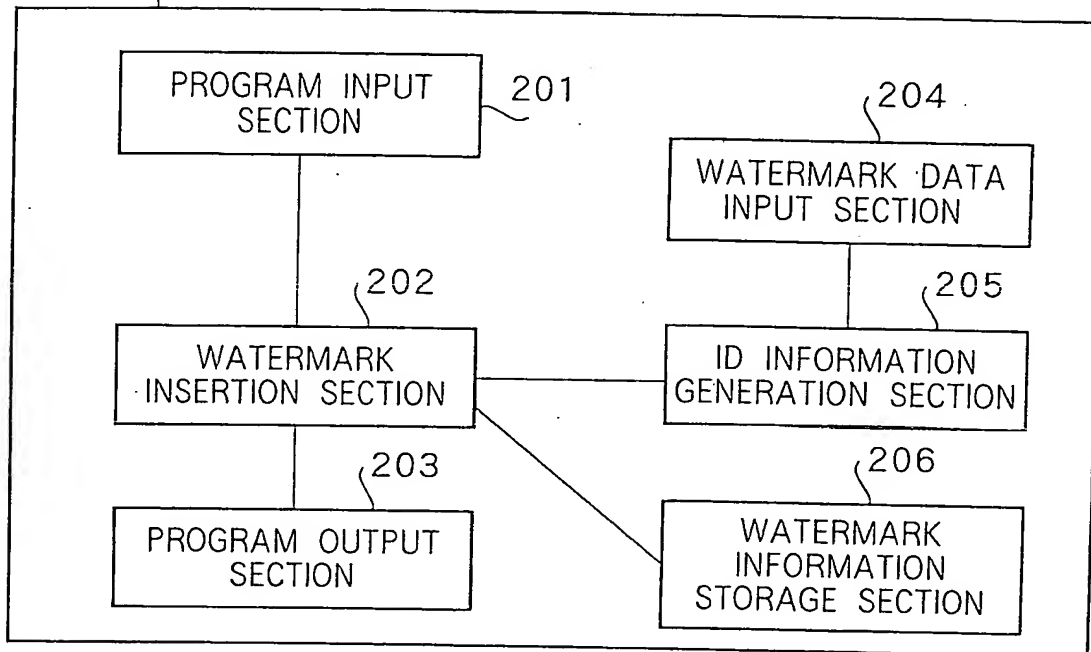


FIG. 2

30 WATERMARK EXTRACTION APPARATUS

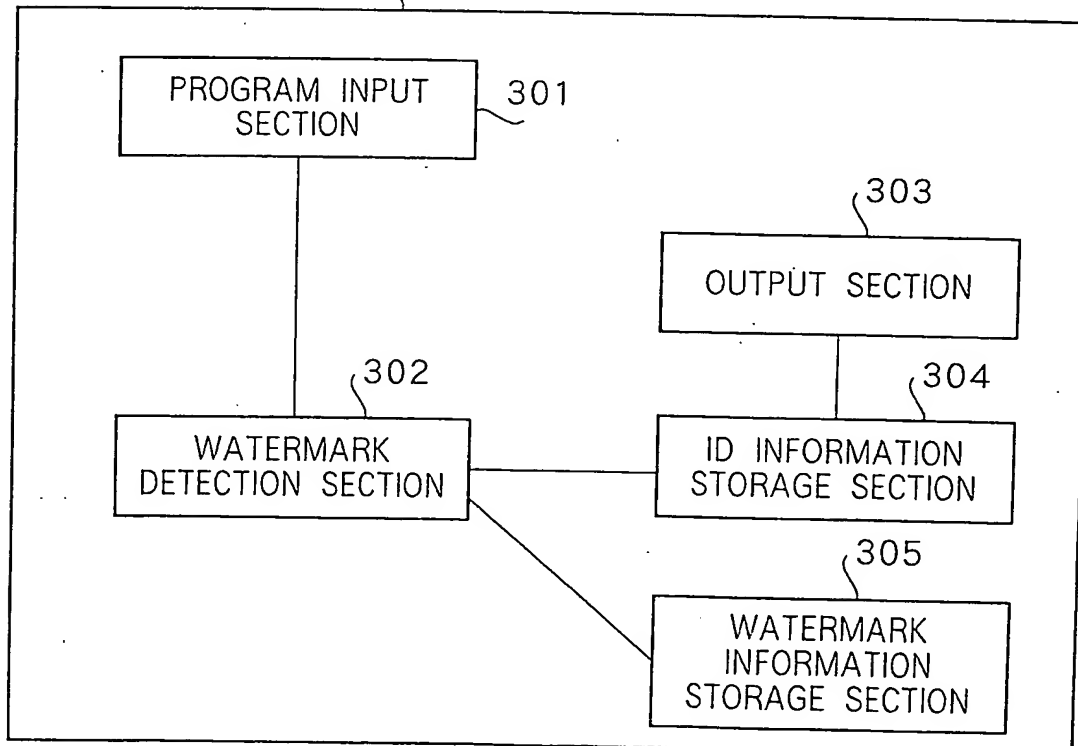


FIG. 3

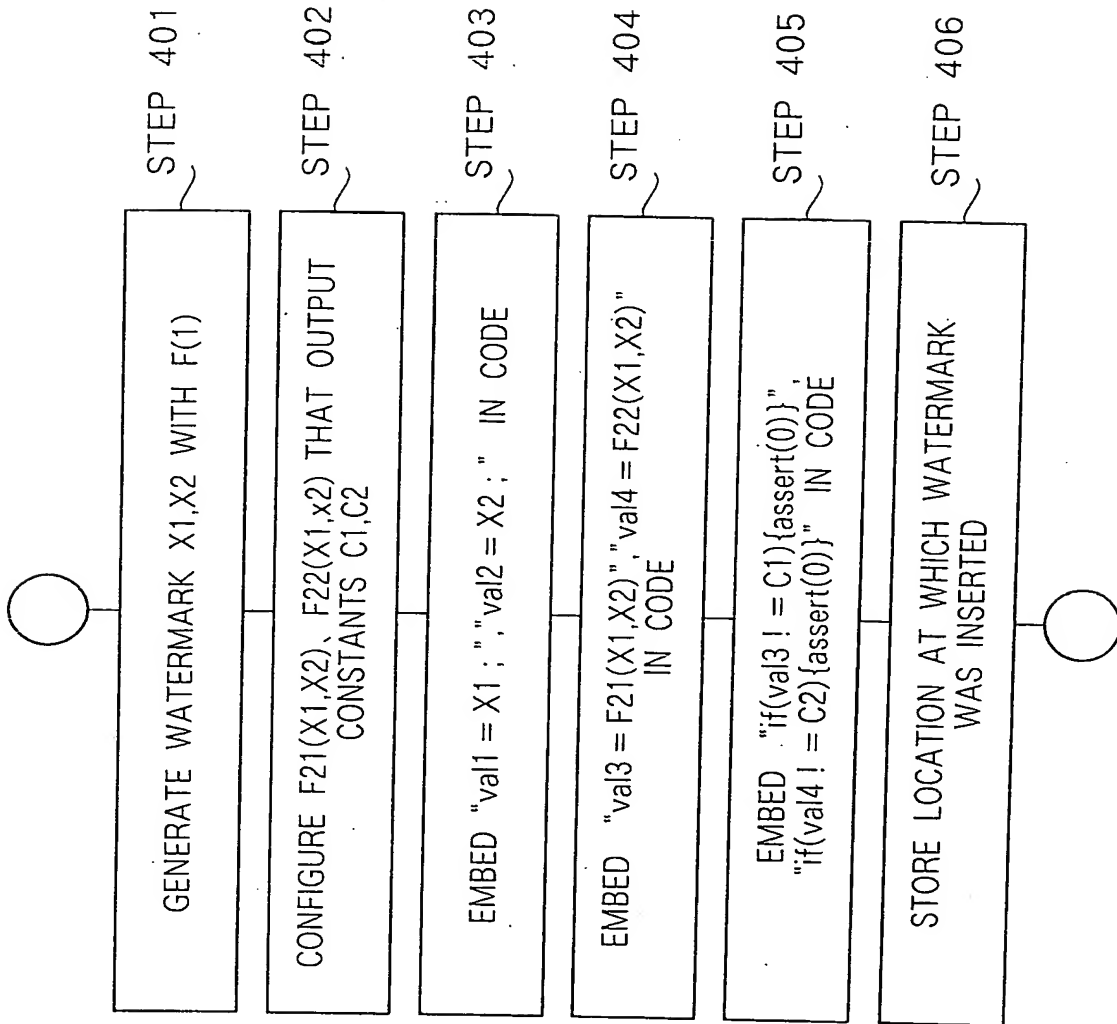


FIG. 4

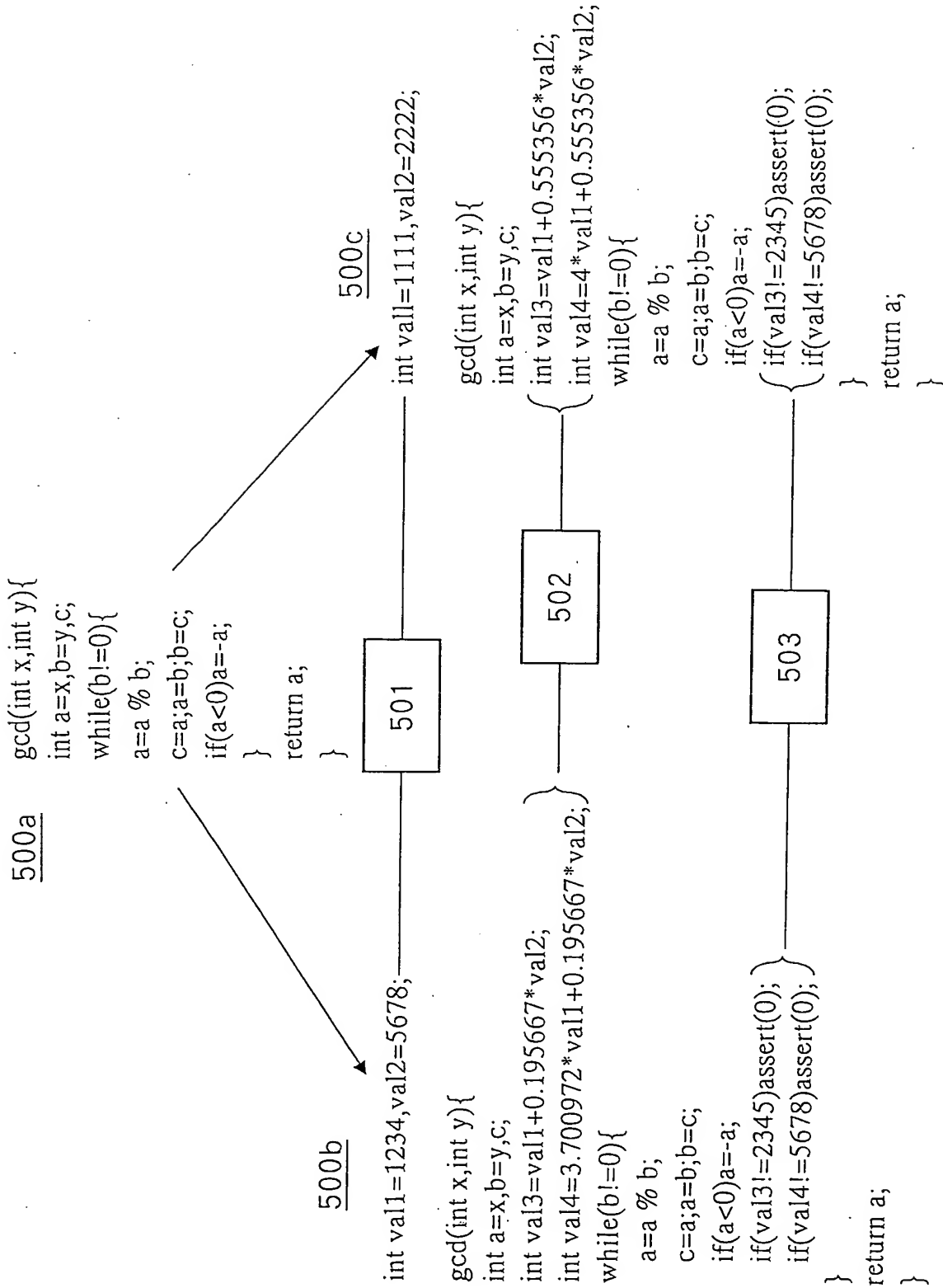


FIG. 5

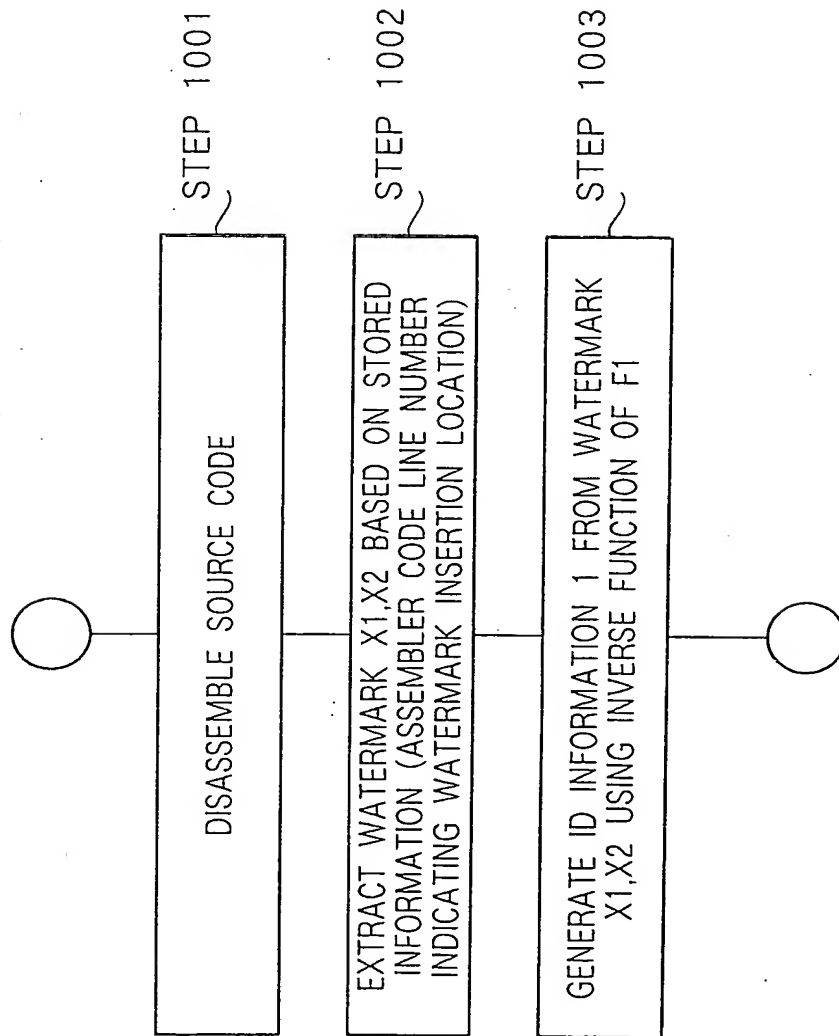


FIG. 6

6/16

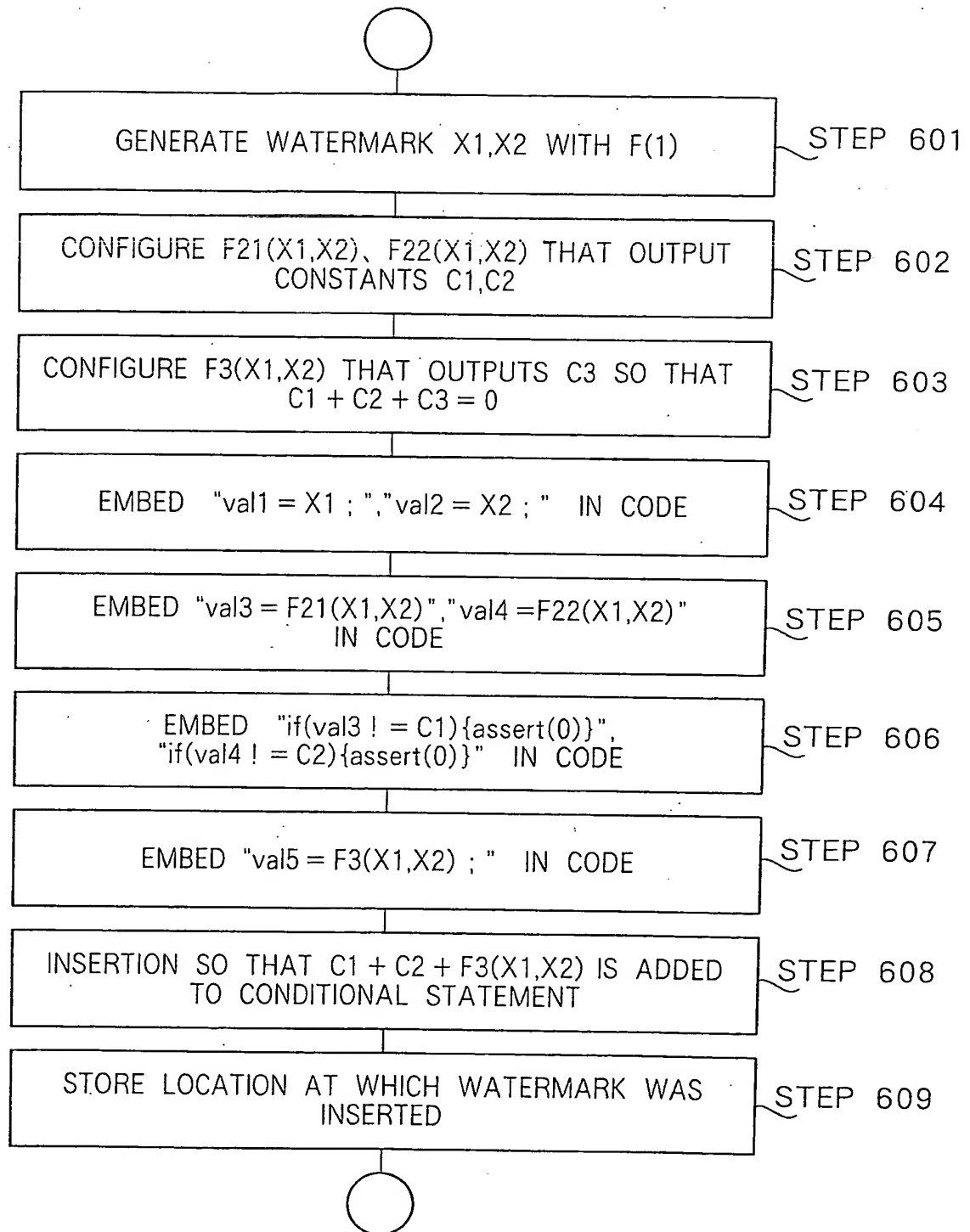


FIG. 7

7/16

800a

```

gcd(int x,int y){
int a=x,b=y,c;
while(b!=0){
a=a % b;
c=a; a=b; b=c;
if( a<0)a=-a;
}
return a;
}

```

800b

```

int val1=1234,val2=5678; ~701

```

```

gcd(int x,int y){
int a=x, b=y, c;
int val3=val1+0.195667*val2;
int val4=3.700972*val1+0.195667*val2;
int val5=5.601297*val1+0.195667*val2; } 702
while(b!=0){
a=a % b;
c=a;a=b;b=c;
if(a<val3+val4+val5)a=-a; ~703
if(val3!=2345)a++;
if(val4!=5678)assert(0); } ~704
}
return a;
}

```

FIG. 8

8/16

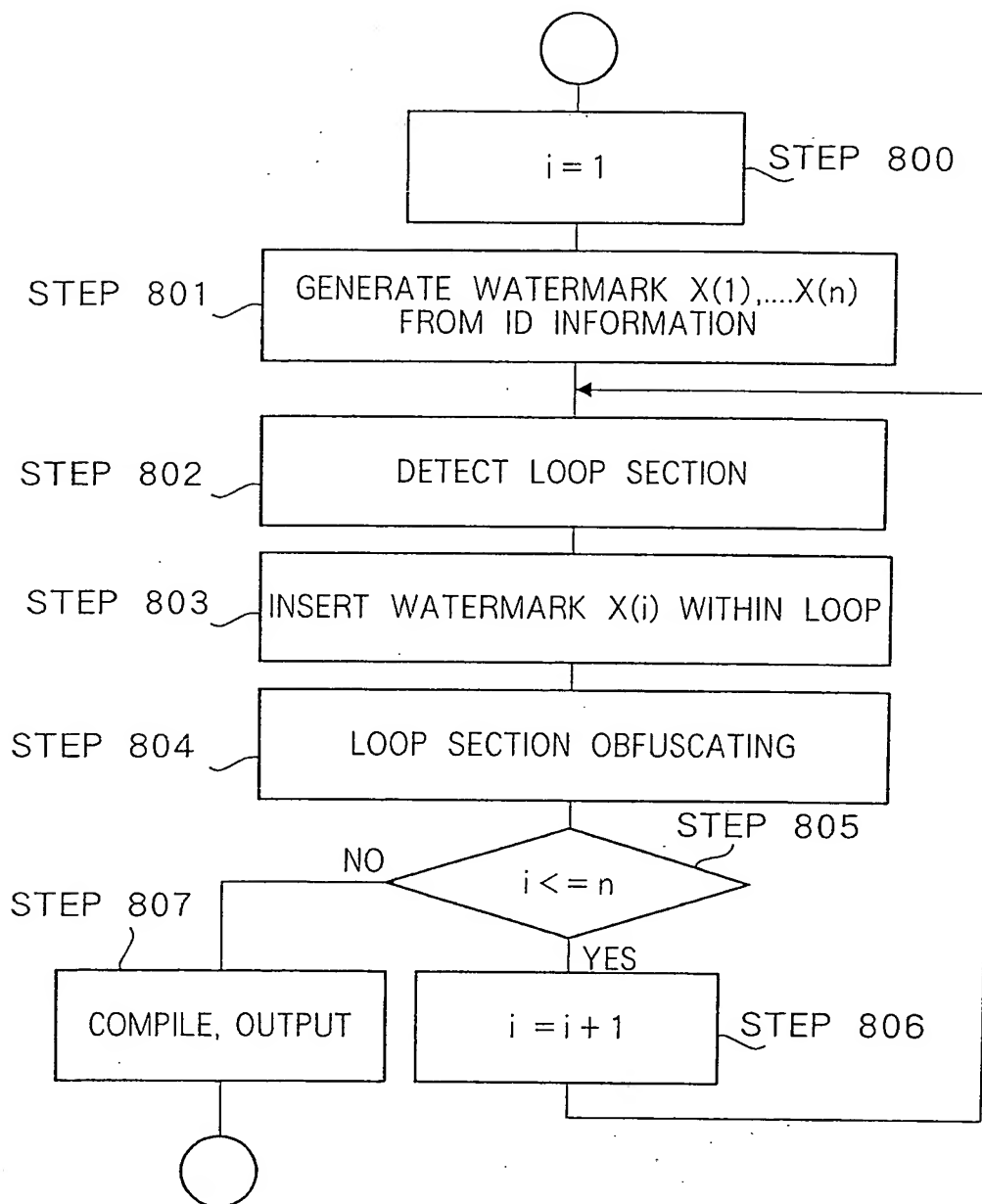


FIG. 9

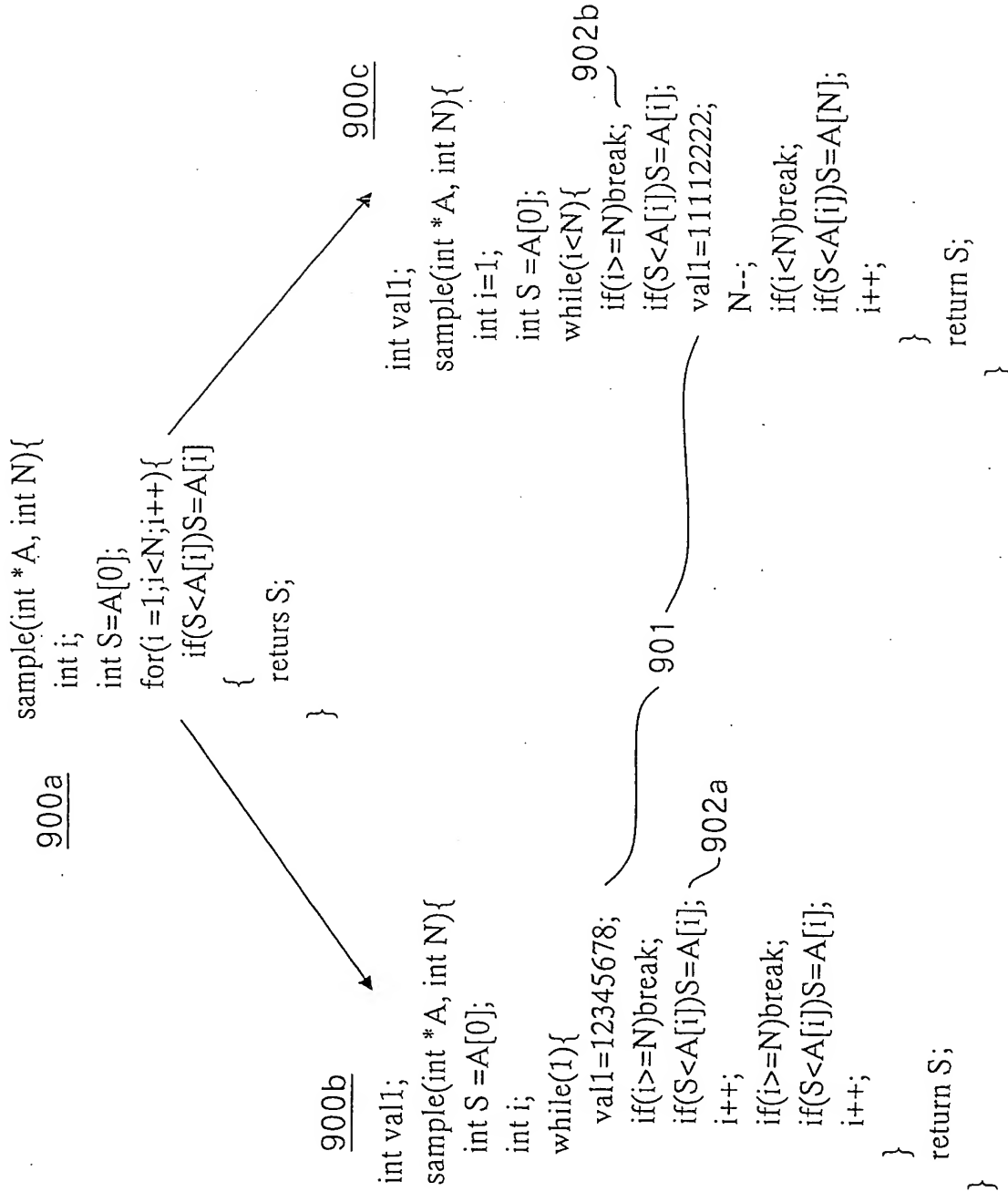


FIG.10

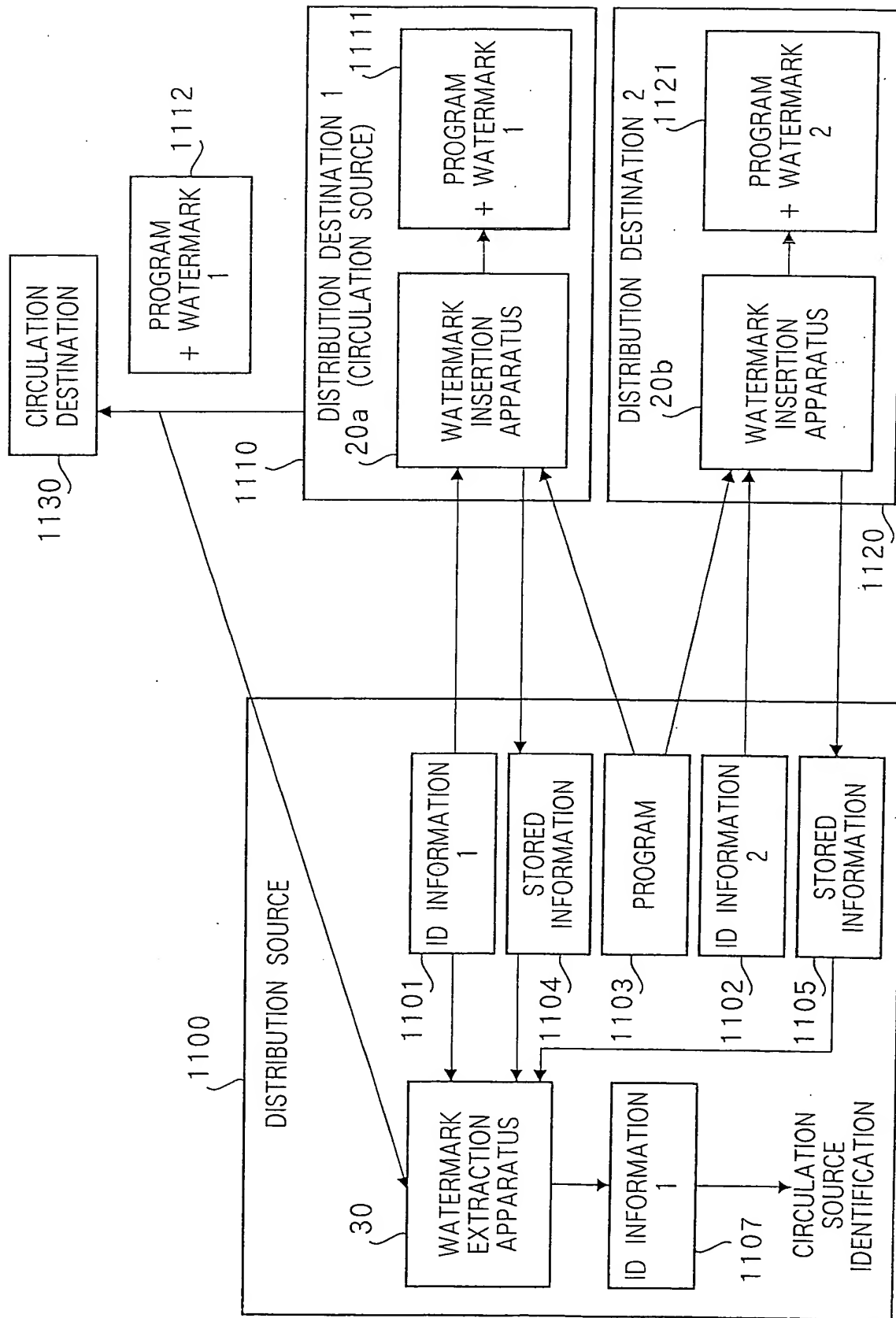


FIG. 11

1200 WATERMARK INSERTION APPARATUS

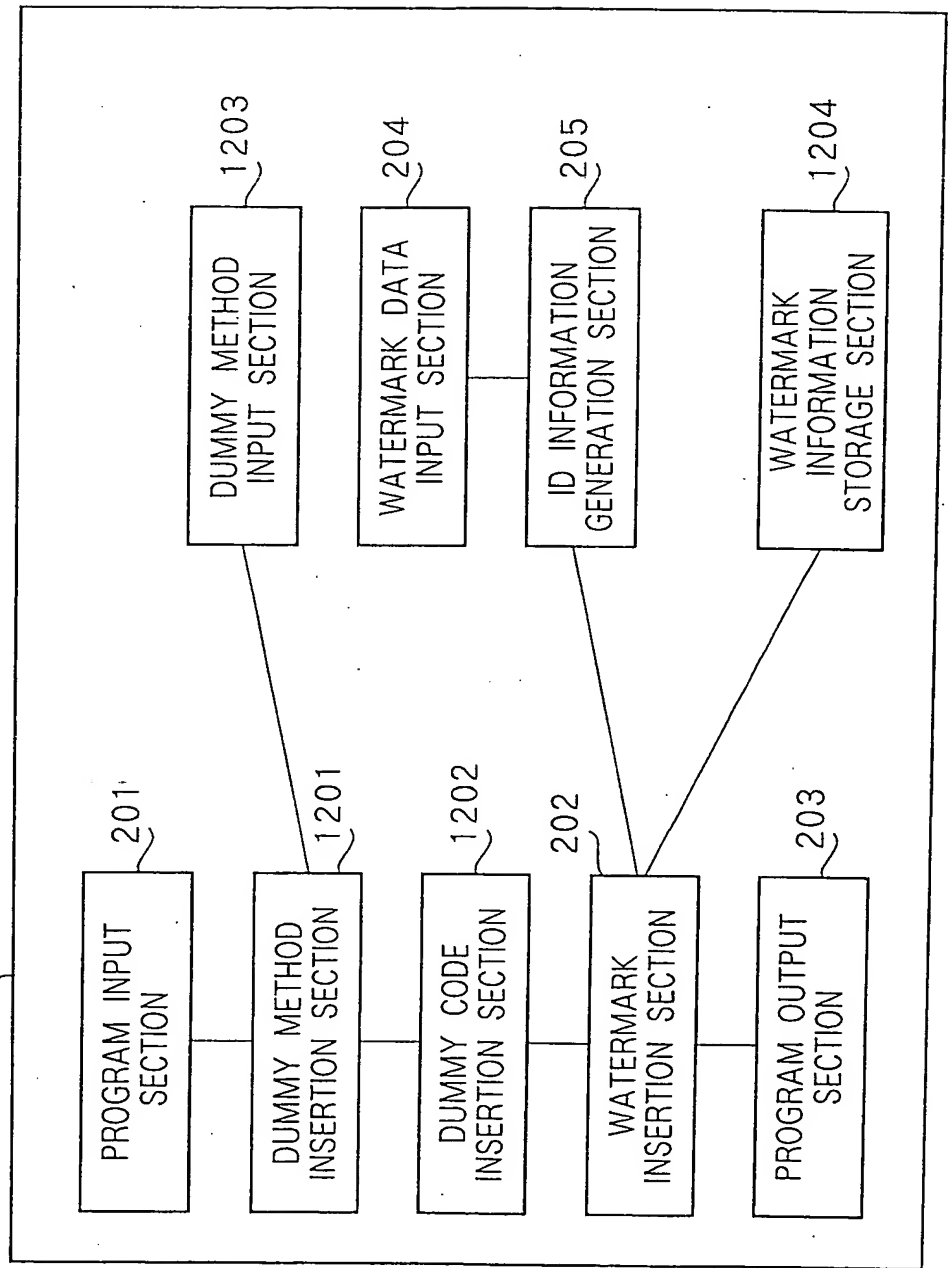


FIG.12

12/16

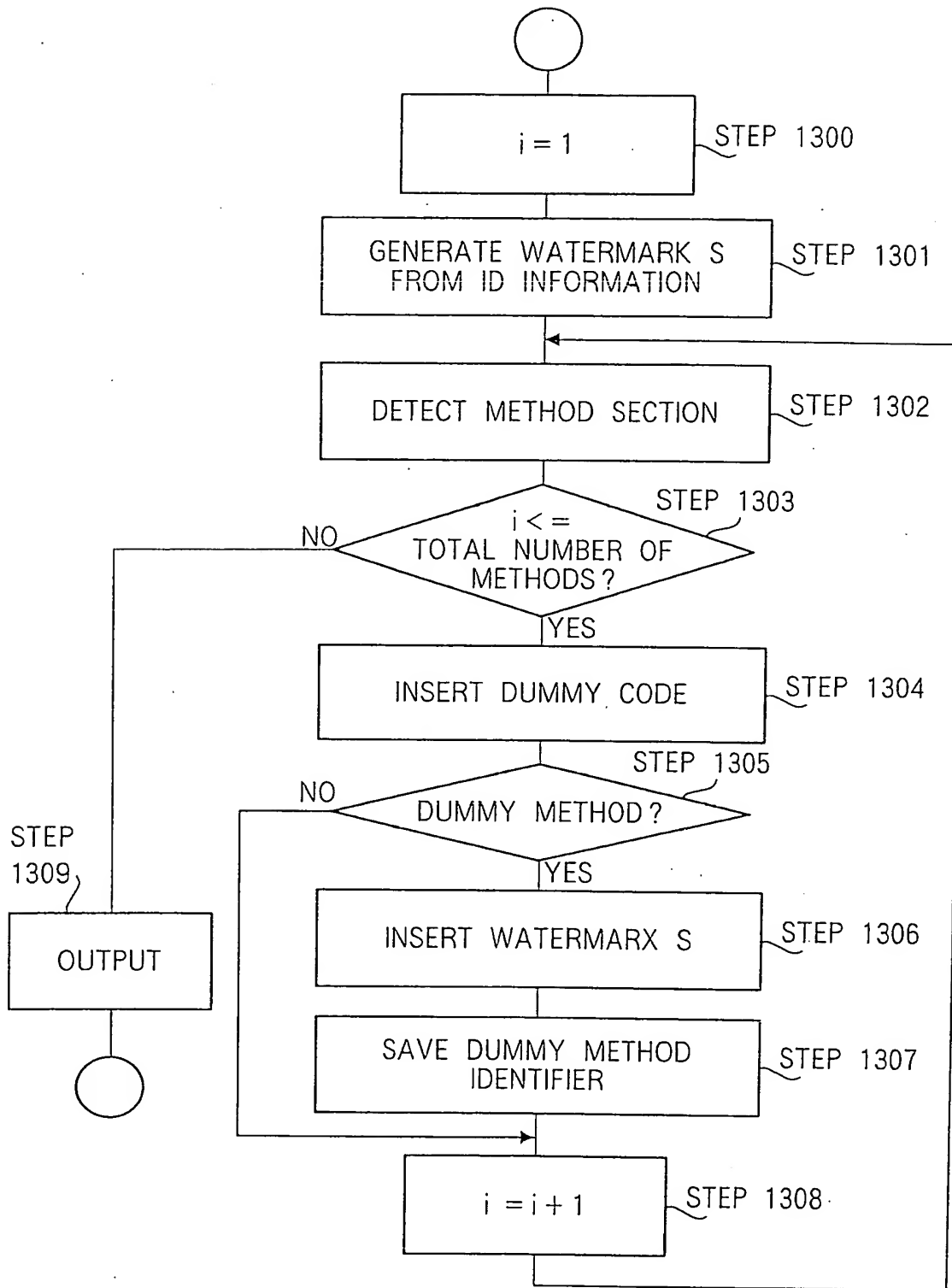


FIG.13

13/16

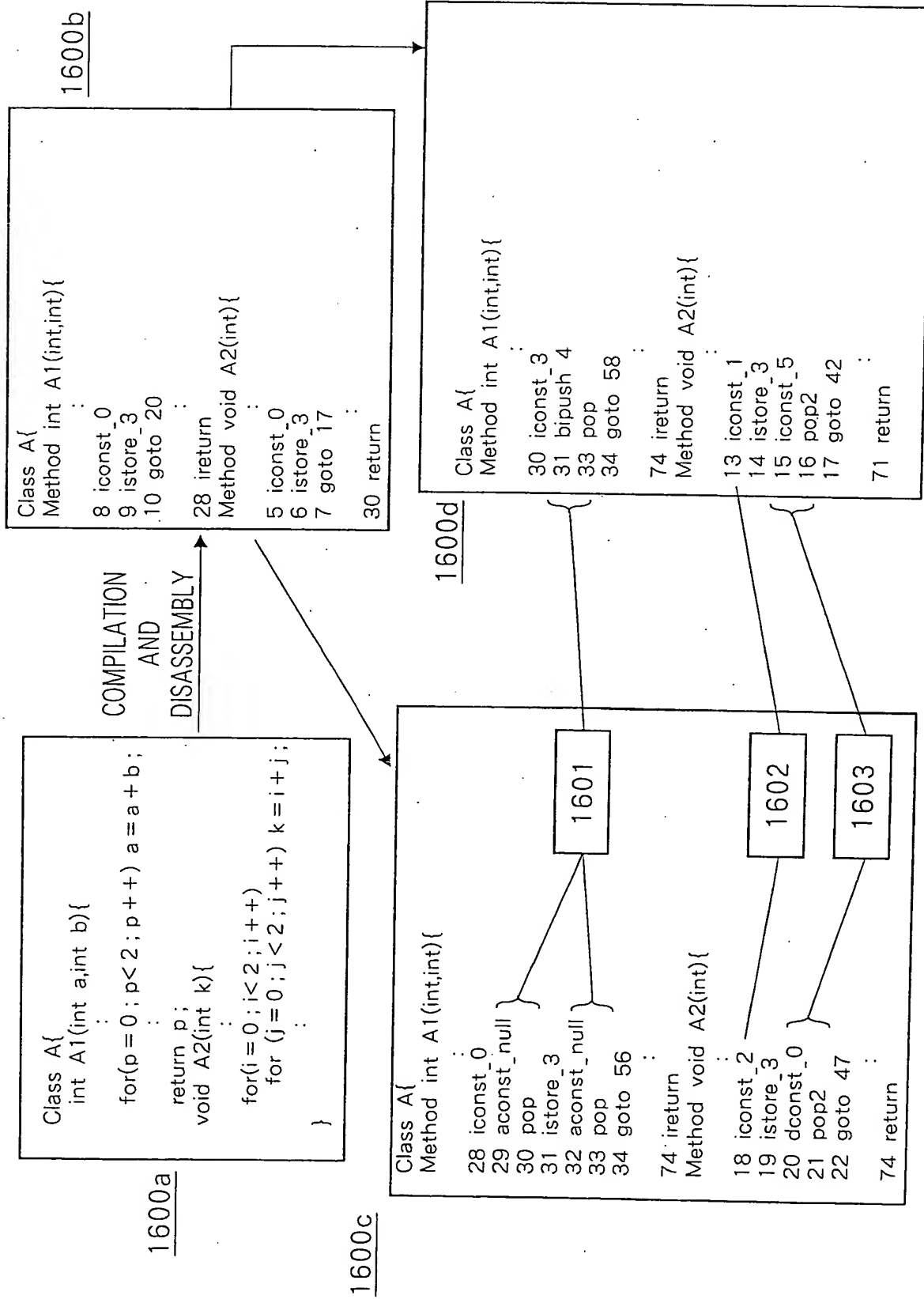


FIG.14

14/16

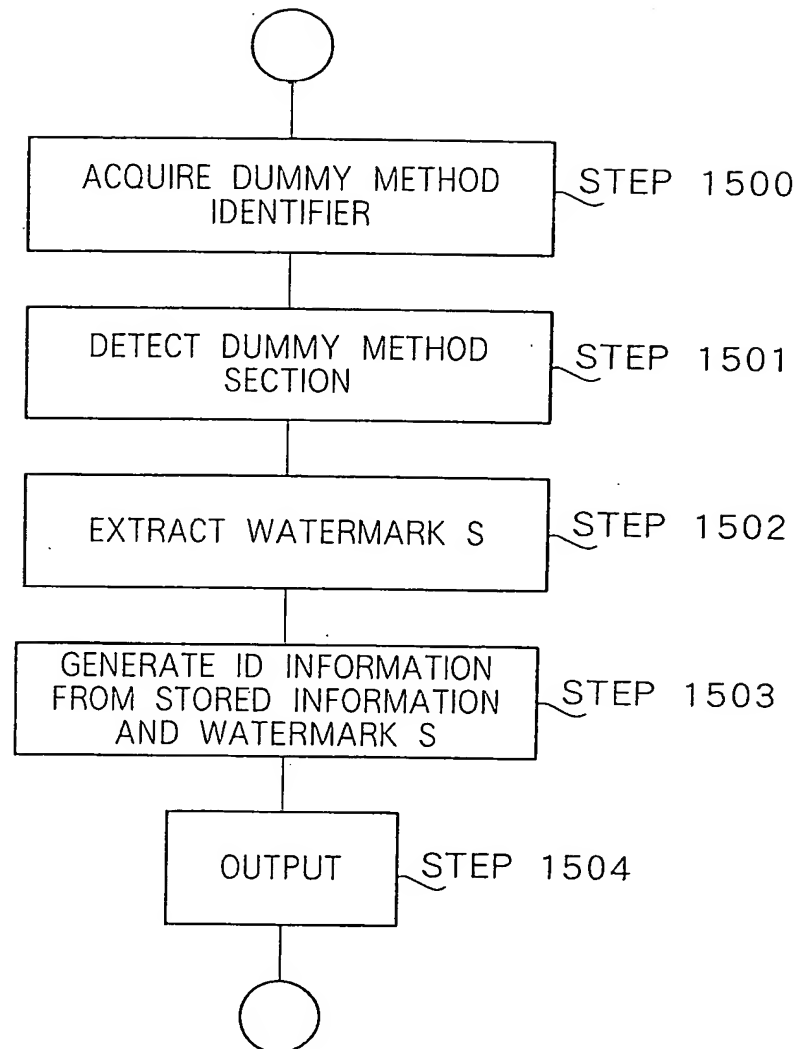


FIG.15

15/16

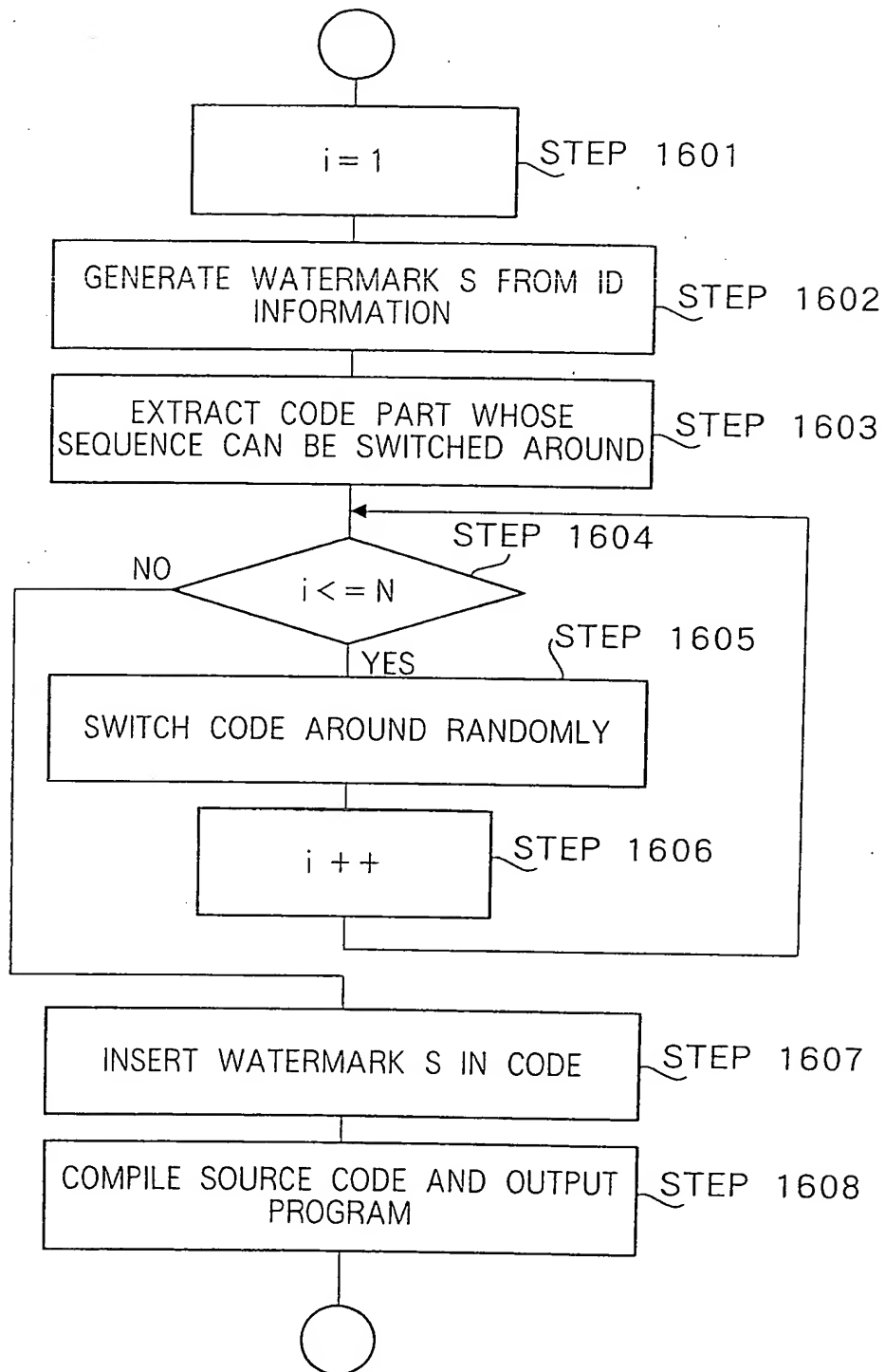


FIG.16

16/16

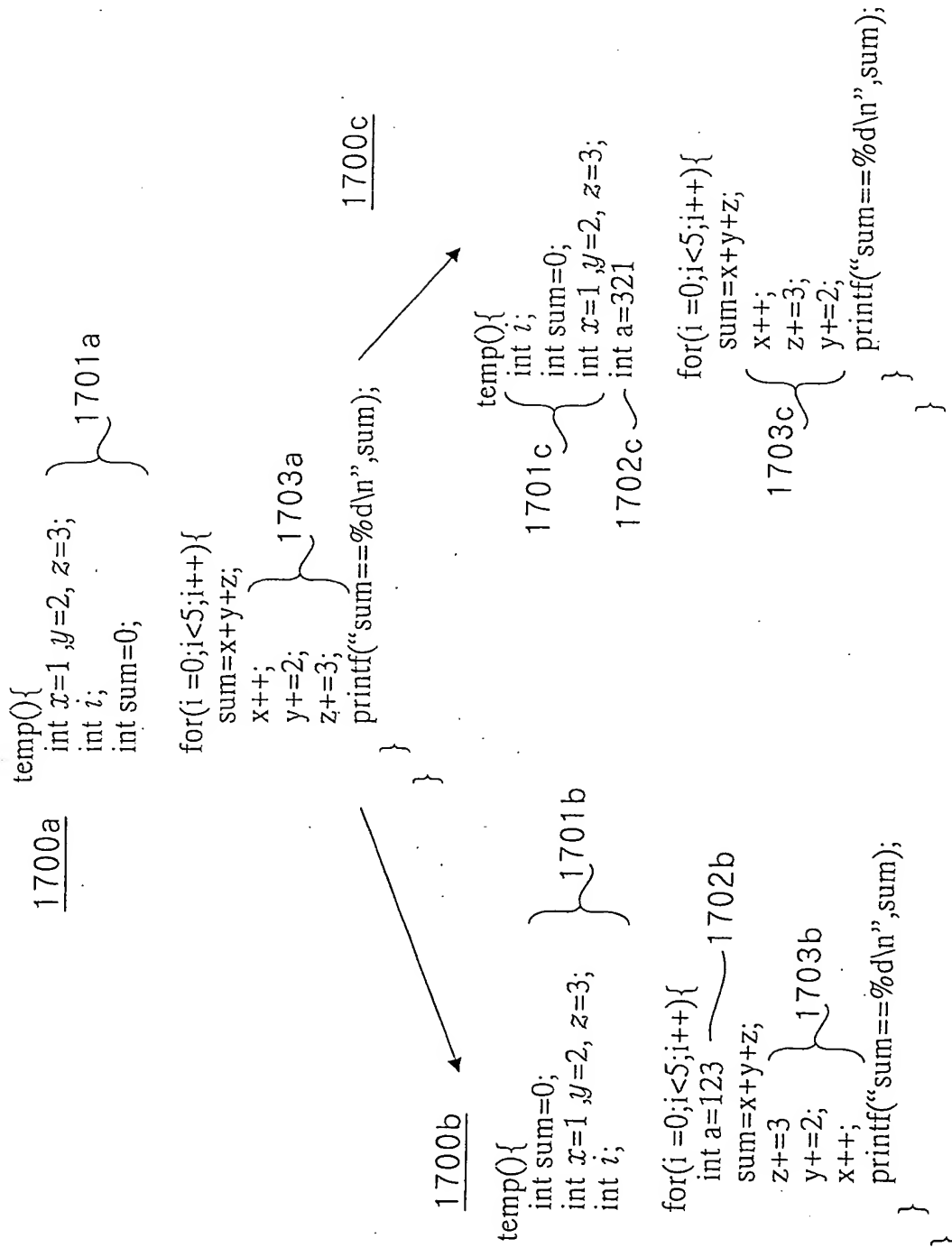


FIG.17